

Patent Claims

1. Organic electroluminescent component, particularly an organic light-emitting diode, characterized by

- a transparent bottom electrode (22) situated on a substrate (21);
- 5 -- a top electrode (26) composed of a metal that is inert to oxygen and moisture;
- at least one organic function layer (23, 24) arranged between the bottom electrode (22) and the top electrode (26); and
- a charge carrier injection layer (25) containing a complex metal salt of the composition $(Me1)(Me2)F_{m+n}$, whereby the following applies:
- 10 m and n are respectively a whole number corresponding to the valence of the metals Me1 and Me2 (the metal Me1 thereby has the valence m, the metal Me2 the valence n),
- Me1 = Li, Na, K, Mg or Ca,
- 15 Me2 = Mg, Al, Ca, Zn, Ag, Sb, Ba, Sm or Yb,
- with the prescription: Me1 \neq Me2.

2. Component according to claim 1, characterized in that the top electrode (26) is composed of aluminum, silver, platinum or gold or of an alloy of two of these metals.

20 3. Component according to claim 1 or 2, characterized in that the charge carrier injection layer (25) is arranged between the top electrode (26) and the organic function layer (24).

4. Component according to one of the claims 1 through 3, characterized in that the charge carrier injection layer (25) comprises a thickness between 0.1 and 20 nm.

5. Component according to one or more of the claims 1 through 4, characterized in that the metal Me1 is lithium (Li) and/or the metal Me2 is magnesium (Mg), aluminum (Al), calcium (Ca), silver (Ag) or barium (Ba).

6. Component according to claim 5, characterized in that the complex metal salt is $LiAlF_4$, $LiAgF_2$ or $LiBaF_3$.

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7. Component according to one or more of the claims 1 through 6,
characterized in that two organic function layers (23, 24) are arranged between the
bottom electrode (22) and the top electrode (26), whereby an apertured conducting
layer (23) is located on the bottom electrode (22) and an emission layer (24) is located
5 on said conducting layer (23).

8. Component according to claim 7, characterized in that the apertured
conducting layer (23) contains N,N'-bis-(3-methylphenyl)-N,N'-bis(phenyl)-
benzidine, 4,4',4''-tris-(N-1-naphthyl-N-phenylamino)-triphenylamine or N,N'-bis-
phenyl-N,N'-bis- α -naphthyl-benzidine and/or the emission layer (24)
10 hydroxyquinoline aluminum-III salt.

9. Component according to one or more of the claims 1 through 8,
characterized in that the bottom electrode (22) is composed of indium tin oxide.

10. Component according to one or more of the claims 1 through 9,
characterized in that a electron transport layer is arranged on the at least one organic
15 function layer (23, 24).

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